

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-6. (Canceled).

7. (Currently Amended) A network element apparatus comprising:

a receiving section that receives a binding update message from a sender node;

a recording section that records an entry containing a home address field indicating a unique global address, a care-of-address field indicating a temporarily assigned global address, and an access router address field indicating a global address of a higher level router to which the sender node is connected, in a corresponding manner with the received binding update message;

~~The network element apparatus according to claim 5~~ a packet forwarding section that searches the recording section ~~entry~~ based on a destination of a packet received by the network element apparatus and obtains the temporarily assigned global address corresponding to the destination and the global address of the higher level router to which the destination network element apparatus is connected;

an address obtaining section that repeats in a recursive manner searching of the entry of the higher level router based on the obtained global address of the higher level router and obtaining of the temporarily assigned global address of the higher level router;

a routing header constructing section that constructs a routing header in reverse order from an order of obtaining the address, and thereby constructs a packet to which the routing header is

added, the routing header including an address of a higher level router arranged at a head and a temporarily assigned global address of a mobile node and the unique global address arranged at a tail in that order; and

a section that sets the address at the head of the constructed routing header as a destination of the packet.

8. (Currently Amended) The network element apparatus according to claim 7, wherein, when the destination of the packet received by the network element apparatus or a last entry of the routing header is not a valid address in a local network or the destination of the packet is a care-of-address of the network element apparatus and the routing header is not added, the received packet is discarded.

9-11. (Canceled).